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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/876,812 06/17/97 DOUGLAS

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EXAMINER

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RUSSET, J

ART UNIT

PAPER NUMBER

1841

12

DATE MAILED:

11/17/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/876812

Applicant(s)

Douglas, et al.

Examiner

Russert

Group Art Unit

1641

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-16 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-16 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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DETAILED ACTION

Response to Amendment

1. Claims 1-16 are pending in the application. Claims 1-16 are under consideration.
2. The text of those sections of Title 35 U.S.C. not included in this action can be found in a prior action.

Claim Rejections - 35 USC § 103

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diebold, et al. in view of Ovshinsky et al.

Applicants argue Diebold uses conventional conductor and semiconductor materials but does not utilize amorphous semiconductor materials, further stating that Ovshinsky does use the amorphous semiconductor material but is not describing a technology that is directed towards electrochemical test devices, nor does Ovshinsky specifically mention a substitution of amorphous semiconductor materials for conventional conductor materials in electrochemical devices. Moreover, Applicants state that Diebold does not teach a process enabling continuous roll manufacturing of the electrochemical test devices. Rather the reference teaches a “step and repeat” process of photolithography to define the electrode areas. Moreover, Applicants state that the immediate invention is claiming plural electrodes and the only embodiment of discloses plural electrodes is Figures 7A-8B of Diebold, where Figures 1-6 of Diebold disclose only a single test electrode. Moreover, Applicants state that Diebold does not teach a working electrode and a

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counter electrode both affixed to a non-conductive surface comprising a non-conductive coating on a flexible material. Finally, Applicants state there is no suggestion nor motivation for the combination of the references of Diebold and Ovshinsky, not looking to Ovshinsky to attempt modification of Diebold.

Applicant's arguments filed 9-13-99 have been fully considered but they are not persuasive.

First, in reference to use conventional conductor and semiconductor materials of Diebold, and the use of amorphous semiconductor materials of Ovshinsky, and the combination of the two technologies, it is not necessary that Ovshinsky specifically mention electrochemical devices or a substitution the amorphous semiconductor materials for conventional conductor materials. It is enough that Ovshinsky discloses the amorphous semiconductor materials for use in the broad aspect of devices utilizing current control, such as in the immediate invention, where current is present and an amorphous semiconductor film forms the electrode (current flow) region and provides improvement in the art by increasing photoconductivity, long diffusion length, and low dark intrinsic electrical conductivity where desired. Ovshinsky can then be understood to be describing an improvement in a technology that can be applied to electrochemical devices, therein incorporating the use amorphous semiconductor materials disclosed into the disclosure of Diebold as prior art, where one of ordinary skill in the art would have been motivated to combine the two pieces of art to improve upon electrochemical test devices.

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Secondly, it should be noted that Applicant does not claim the continuously rolling process of electrode formation in the limitations of the claims in the immediate invention, and therefor that element was not considered in rejecting the invention over prior art.

Furthermore, the mention of plural zones in Figures 7A-8B, as well as the mention of plural electrodes in col. 8 line 65 to col 10 line 11, is evidence that Diebold has disclosed the use of more than one electrode in the electrochemical device as described by that patent, regardless of Figures 1-6. The use of plural electrodes in an electrochemical device is then considered prior art.

Finally, Diebold specifically teaches a working electrode and a counter electrode both affixed to a non-conductive surface comprising a non-conductive coating on a flexible material. This embodiment is taught throughout the patent, especially see col. 4 lines 36-48 describing Figure 1 with first insulating substrate 4 (flexible material), coated with second insulating substrate 5, to which the electrodes are affixed. Working and counter electrodes are mentioned in col. 3 line 50.

NO CLAIM IS ALLOWED

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Russert whose telephone number is (703) 308-3512. The examiner can normally be reached on Monday-Friday from 8 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel, can be reached on (703) 308-4027. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.


YVONNE EYLER, Ph.D.
PRIMARY EXAMINER

Jennifer Russert
Patent Examiner